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09/734,973	12/11/2000	Ruston Panabaker	150426.01	4645

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MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052-6399	CHOWDHURY, SUMAIYA A

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
01/23/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>12 November 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-5,7-18,30,36-38,40-43 and 45</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-5,7-18,30,36-38,40-43 and 45</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-5, 7-18, 30, 36-38, 40-43, and 45

have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 5, 7-11, 14-18, 36-38, 40-43, and 45 are rejected under 35 U.S.C.

103(a) as being unpatentable over Carr (US Pat App Pub No 2003/0133043) in view

of Mori (7013479), in view of Kuzma (US Pat No 5,889,950), in view of Boetje

(6198906) further in view of the ATVEF specification, further in view of Keronen et

al. (US Pat No 6,567,530), further in view of Geshwind (7080392), and further in

view of Miller (5801685).

    In regard to claim 1, the Carr reference discloses a method and apparatus of

communicating audio/video programs with enhancement data. The claimed step of

obtaining a schema document, the schema document comprising a trigger data

structure an announcement data structure, and a package data structure defining

enhanced programming content is met by the content creator 12 providing

enhancement data to transport operator 14 (Figure 1). The enhancement data provided

by the content creator 12 includes "an ATVEF announcement, a resource, and a trigger"

(Paragraph 0020, Lines 3-4). The enhancement data includes synchronization

information (Paragraph 0013). The announcement data meets the limitation of a

package data structure. "An announcement may describe the location of both the

resource stream and the trigger stream" (Para 0021, Lines 5-6). The claimed step for a

timeline data structure regarding timing for the delivery of enhanced programming

content is met by storage medium 113 and the controller 106 (Figure 2). The

enhancement data is stored in storage medium 113 and is "accessed" by the controller

106. "The controller 106 may be run under control of a software routine 108 (referred to

as a transport routine). The transport routine 108 may initially be stored in a storage

medium 104 and loaded by the controller 106 for execution. Instructions and data of the

transport routine 108 may also be stored in the storage medium 104" (Paragraph 0034,

Lines 12-17). "The enhancement data and special announcements may be stored in a

storage medium 113" (Paragraph 0034, Lines 23-25). The enhancement data stored

includes an ATVEF announcement, which provides the instruction for delivery of the

enhanced programming content. "The controller 106 detects presence of

announcements when they appear at the ATVEF announcement address and port in

the transport operator system 14. The announcements are separated out onto different

IP addresses corresponding to the A/V channels, with one IP address assigned for the

one or more ATVEF announcements associated with each A/V channel" (Paragraph

0038, Lines 12-19). The enhancement data is stored in storage medium 113 and is

"accessed" by the controller 106, where the enhancement data includes synchronization

information. The examiner interprets synchronization information to be timeline data.

The enhanced programming content includes the trigger data structure, announcement

data structure, package data structure and timeline data structure (As discussed

earlier, Carr teaches the enhancement data includes an ATVEF announcement

(package data), a resource, trigger, and synchronization information (timeline data)

each corresponding to it specific structures respectively– [0020], [0021], [0013], [0034],

[0038]).

The reference fails to explicitly disclose the claimed step of the timeline data

structure containing instructions for specifying times relative to a specific start time for

delivery and a particular order for delivering each of the trigger, announcement and

package data structures to the receiver. The reference also fails to explicitly disclose

the step analyzing the timeline data structure to determine when to deliver each of the

trigger, announcement and package data structure; wherein the delivering step

comprises delivering the enhanced programming content in an asynchronous order, and

wherein the timeline data structure designates a particular number of frames following

the specific start time to specify when the trigger data structure, the announcement data

structure, and the package data structure will be delivered.

In an analogous art, Mori teaches a timeline data structure (schedule) which

specifies the time for delivery of a trigger signal (i.e. "reproduction message") and cache

message from the distribution unit to the receiver (col. 4, line 62-col. 5, line7). The

distribution unit stores the schedule indicating a desired synchronization between the

items of enhanced content and the broadcast program with which the enhanced content

is associated (col. 4, lines 38-62). The message transmitting unit analyzes the schedule

and transmits the cache message and the reproduction message in accordance with the

schedule shown in the message scheduling table 110b (fig. 6, col. 5, lines 17-20, col. 7,

lines 52-67).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to modify Carr's invention to include the above mentioned

limitation, as taught by Mori, such that the receiver can immediately display an image in

response to any possible interactive operation without causing the user to wait even

immediately after a data broadcast program is started. ·

However, Carr and Mori fail to teach:

A schema document that is generic and non-specific to hardware that comprises

a timeline data structure specifying a particular order for delivering each of the trigger,

announcement and package data structures to the receiver; and

the timeline including a loop attribute to prevent multiple deliveries of the

enhanced programming content to the receiver.

wherein the delivering step comprises delivering the enhanced programming

content in an asynchronous order, and

wherein the timeline data structure designates a particular number of frames

following the specific start time to specify when the trigger data structure, the

announcement data structure, and the package data structure will be delivered.

Kuzma teaches a schema document that is generic and non-specific to hardware (Figures 3-6, Co 2, Lines 38-54; Col 5, Line 63-Col 7, Lines 14).

Consequently, it would have been obvious to one of ordinary skill in the art to implement Carr with a schema document that is generic and non-specific to hardware such that it is compatible with any device.

However, Carr, Mori, and Kuzma fail to teach

that comprises a timeline data structure specifying a particular order for delivering;

the timeline including a loop attribute to prevent multiple deliveries of the enhanced programming content to the receiver.

wherein the delivering step comprises delivering the enhanced programming content in an asynchronous order, and

wherein the timeline data structure designates a particular number of frames following the specific start time to specify when the trigger data structure, the announcement data structure, and the package data structure will be delivered.

In an analogous art, Boetje teaches specifying an order of when to deliver relative to a specific start time. For example, a schedule is created which specifies that an event will start 30 min from start of the playlist. – col. 14, line 12-col. 15, line 27.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Carr, Mori, and Kuzma's invention to include the above mentioned limitation, as taught by Boetje, to enable immediate cross-checking for

violation of temporal constraints when time values are changed for violation of temporal

constraints when the playlist is changed.

The combination of Carr, Mori Kuzma, and Boetje fail to explicitly disclose:

the timeline including a loop attribute to prevent multiple deliveries of the

enhanced programming content to the receiver.

wherein the delivering step comprises delivering the enhanced programming

content in an asynchronous order, and

wherein the timeline data structure designates a particular number of frames

following the specific start time to specify when the trigger data structure, the

announcement data structure, and the package data structure will be delivered.

The ATVEF specification teaches a loop attribute to prevent multiple deliveries of

the enhanced programming content to the receiver. The ATVEF specification discloses

with respect to the parameter RetransmitExpiration: "This allow a resource to be

carouseled, or sent repeatedly to increase the chances of delivery without missing

segments. Set to zero if the resource will not be retransmitted" (Page 22).

Consequently, it would have been obvious to one of ordinary skill in the art to the

combined teaching with a loop attribute to prevent multiple deliveries of the enhanced

programming content to the receiver so as to conform to the ATVEF specification.

The combination of Carr, Mori Kuzma, Boetje and the ATVEF specification fail to

explicitly disclose:

the step of verifying the authenticity of the schema document by comparing the

schema document against a stored standardized schema document.

wherein the delivering step comprises delivering the enhanced programming content in an asynchronous order, and

wherein the timeline data structure designates a particular number of frames following the specific start time to specify when the trigger data structure, the announcement data structure, and the package data structure will be delivered.

Keronen teaches verifying the authenticity of a document by comparing the document by comparing a document against a stored standardized document so as to ensure that a document is of proper form (Col 2, Lines 22-27).

Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with verifying the authenticity of a document by comparing the schema document by comparing a document against a stored standardized document so as to ensure that a document is of proper form.

However, Carr, Mori Kuzma, Boetje, the ATVEF specification, and Keronen fail to explicitly disclose:

wherein the delivering step comprises delivering the enhanced programming content in an asynchronous order, and

wherein the timeline data structure designates a particular number of frames following the specific start time to specify when the trigger data structure, the announcement data structure, and the package data structure will be delivered.

In an analogous art, Geshwind teaches transmitting data in an asynchronous order (col. 8, lines 35-42).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Carr, Mori Kuzma, Boetje, the ATVEF specification, and Keronen's invention to include the above mentioned limitation, as taught by Geshwind, for the well known advantage of providing more flexibility rather than being blocked by waiting for a return.

However, Carr, Mori Kuzma, Boetje, the ATVEF specification, Keronen, and Geshwind fail to teach wherein the timeline data structure designates a particular number of frames following the specific start time to specify when the trigger data structure, the announcement data structure, and the package data structure will be delivered.

In an analogous art, Miller teaches a frame offset defines the time of the drop location if the control link sequence from the beginning of the script text (col. 16, lines 10-15, lines 50-60).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Carr, Mori Kuzma, Boetje, the ATVEF specification, Keronen, and Geshwind's invention to include the above mentioned limitation, as taught by Miller, for the advantage of maintaining synchronization between the script and segments.

In regard to claim 3, the claimed step for accessing the schema document comprises the step of retrieving the schema document from a repository containing a

plurality of schema documents is met by storage medium 113 and the controller 106 (Figure 2 of Carr). The enhancement data is stored in storage medium 113 and is "accessed" by the controller 106. "The controller 106 may be run under control of a software routine 108 (referred to as a transport routine). The transport routine 108 may initially be stored in a storage medium 104 and loaded by the controller 106 for execution. Instructions and data of the transport routine 108 may also be stored in the storage medium 104" (Paragraph 0034, Lines 12-17). "The enhancement data and special announcements may be stored in a storage medium 113" (Paragraph 0034, Lines 23-25). The enhancement data stored includes an ATVEF announcement, which provides the instruction for delivery of the enhanced programming content. "The controller 106 detects presence of announcements when they appear at the ATVEF announcement address and port in the transport operator system 14. The announcements are separated out onto different IP addresses corresponding to the A/V channels, with one IP address assigned for the one or more ATVEF announcements associated with each A/V channel" (Paragraph 0038, Lines 12-19).

In regard to claim 5, the claimed limitation of the enhanced programming content comprising at least one of an announcement element, a trigger element, and a package element is met by the content creator 12 providing enhancement data to transport operator 14 (Figure 1 of Carr). The enhancement data provided by the content creator 12 includes "an ATVEF announcement, a resource, and a trigger" (Paragraph 0020,

Lines 3-4). The enhancement data includes synchronization information (Paragraph

0013). The examiner interprets the resource to be the package element.

In regard to claim 7, the claimed step of synchronizing the enhanced

programming content with the television programming is met by "a trigger synchronizes

the enhancement data with the TV transmission" (Paragraph 0021 of Carr).

In regard to claim 8, the reference discloses that the enhancement data is

delivered with a communications protocol. "The three components may be transmitted

using Internet Protocol (IP) multicast to the receivers" (Paragraph 0021 of Carr).

In regard to claim 9, the Carr reference discloses two types of protocols which met

the limitations for transport A protocol and transport B protocol. "The three

components may be transmitted using Internet Protocol (IP) multicast to the

receivers. An IP multicast standard is described in Request for Comment (RFC)

1301, entitled "Multicast Transport Protocol." RFCs may be available at website

address [http://www.ietf.org/rfc.html]" (Paragraph 0020, Lines 4-8). And, the "ATVEF

Specification may utilize a one-way transmission protocol (the Unidirectional

Hypertext Transfer Protocol or UHTTP, described in the ATVEF Specification) to

deliver resource data" (Paragraph 0021, Lines 9-12).

In regard to claim 10, the Carr reference discloses a method and apparatus of communicating audio/video programs with enhancement data. The reference fails to explicitly disclose delivering the enhanced programming content before a deliver-by time. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the Carr system with delivering the enhanced programming content before a deliver-by time so as to ensure that the receiver system receives the enhanced programming data necessary for an interactive viewing experience.

In regard to claim 11, the Carr reference discloses a method and apparatus of communicating audio/video programs with enhancement data. The reference fails to explicitly disclose delivering the enhanced programming content by a start time. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the Carr system with delivering the enhanced programming content by a start time so as to allow the receiver system to be interactive.

In regard to claim 14, the claimed step for delivering an announcement signal comprising the announcement data structure to the receiver, the announcement signal identifying tile availability of enhanced programming content to the receiver is met by the ATVEF announcement. "Generally, an ATVEF announcement indicates that enhancement data is being transmitted, a resource includes one or more files that

contain the enhancement data" (Paragraph 0021, Lines 1-3 of Carr). The steps of

delivering a package comprising the package data, delivering a trigger signal

comprising the trigger data structure and in response to a selection by the viewer to

receive the enhanced programming content, a step for displaying the enhanced

programming content to the viewer is met by: "Generally, an ATVEF announcement

indicates that enhancement data is being transmitted, a resource includes one or more

files that contain the enhancement data, and a trigger synchronizes the enhancement

data with the TV transmission. An announcement may describe the location of both the

resource stream and the trigger stream. For each television (TV) channel, one or more

enhancements may be offered as choices presented to the user, who can select which

of the enhancements, if any, to view" (Paragraph 0021, Lines 1-9 of Carr).

In regard to claim 15, the "package" may include at least one file containing

enhanced programming content. "Enhancement data may include graphics (e.g., web

pages, multimedia information, or other digital data files), presentation layout"

(Paragraph 0013, Lines 13-15 of Carr).

In regard to claim 16, the "package" may include at least one link to enhanced

programming content. "Enhancement data may include graphics (e.g., web pages,

multimedia information, or other digital data files), presentation layout" (Paragraph 0013,

Lines 13-15 of Carr).

In regard to claim 17, the aforementioned combined teaching discloses a method and apparatus of communicating audio/video programs with enhancement data. The reference fails to explicitly disclose the trigger comprising a link to enhanced programming content. However, the examiner gives OFFICIAL NOTICE that it is notoriously well known that a trigger comprises a link to enhanced programming content so as to announce the availability of the interactive television experience to the user. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combined teaching with a trigger that comprises a link to enhanced programming content so as to announce the availability of the interactive television experience to the user.

In regard to claim 18, the step of accepting a notification displayed to the viewer of the availability of enhanced programming content is disclosed. "For each television (TV) channel, one or more enhancements may be offered as choices presented to the user, who can select which of the enhancements, if any, to view" (Paragraph 0021, Lines 7-9 of Carr).

In regard to claims 36-37, Carr discloses the communications line comprises a plurality of different channels. "To provide for greater flexibility and/or to alleviate bandwidth concerns of the transport medium 22, some embodiments of the invention transmit (using IP multicast) enhancement data associated with multiple A/V channels (e.g., TV channels) over a link that is separate from the transport medium used to

transmit A/V content (or, alternatively, that is part of the same delivery mechanism as

the A/V content but is not associated with any A/V channel, e.g., an MPEG-2 transport

stream with ancillary information in a data-only program separate from the A/V

programs)" (Paragraph 0025, Lines 1-10 of Carr).

In regard to claim 38, the Carr reference discloses a method and apparatus of

communicating audio/video programs with enhancement data. The Carr reference

discloses that method may be implemented with a computer readable medium carrying

computer-executable instruction. "The software or firmware can be loaded into the

information delivery system in one of many different ways. For example, instructions or

other code segments stored on one or more storage media or transported through a

network interface card, modem, or other interface mechanism may be loaded into the

system 10 and executed to perform programmed acts. In the loading or transport

process, data signals that are embodied as carrier waves (transmitted over telephone

lines, network lines, wireless links, cables and the like) may communicate the

instructions or code segments to the information delivery system" (Paragraph 0053 of

Carr).

In regard to claim 40, the aforementioned combined teaching discloses a method

and apparatus of communicating audio/video programs with enhancement data. The

combined teaching fails to explicitly disclose using a tag to validate the authenticity of

the document. However, the examiner gives OFFICIAL NOTICE that it is notoriously

well known to use tag for identification purposes so as to ensure correct receipt of

information. Consequently, it would have been clearly obvious to one of ordinary skill in

the art to implement the combined teaching with the use of tags for identification

purposes so as to ensure correct receipt of information.

In regard to claim 41, the time stamp is a deliver by time for the enhancement

data.

In regard to claim 42, the time stamp indicated an order with respect to time for

deliver.

In regard to claim 43, the aforementioned combined teaching fails to explicitly

disclose that the timeline data structure is zeroed at the beginning of the programming.

However, it is submitted that it would have been clearly obvious to one of ordinary skill

in the art tom implement the aforementioned combined teaching with a timeline data

structure that is zeroed at the beginning of the programming so a to provide a time

reference that is relative to the programming.

In regard to claim 45, the aforementioned combined teaching fails to explicitly

disclose providing enhancement content via email, separate from the a/v programming.

However, the examiner gives OFFICIAL NOTICE that it is notoriously well known to

provide enhancement content via email, separate from the a/v programming so as to

allow the user to user their PC to perform tasks with the enhancement content that are

not associated with the programming receiver, thereby increasing system functionality.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to

implement the combined teaching with providing enhancement content via email,

separate from the a/v programming for the stated advantage.

4. Claims 2, 4, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Carr, Kuzma, Boetje ATVEF specification, Keronen et al., Geshwind, Miller, and further

in view of Valdez Jr. (US Pat No 6,426,778).

In regard to claim 2, the aforementioned combined teaching of claim 1 fails to

explicitly disclose a step for viewing television programming deliverable to the receiver

and in response to viewing the television programming, a step for creating the schema

document associated with the television programming. The Valdez Jr. reference

teaches viewing television programming deliverable to the receiver so as to facilitate the

editing of the "compositions" or enhance content and in response to viewing the

television programming creating the schema document associated with the television

programming so as to enhance the viewing pleasure of the television viewer. "Media

playback 311 provides a facility for playing back compositions locally at the playback

system or may transmit a composition as video transmission 321 and data transmission

323" (Col 8, Lines 36-40). And, "to support editing of compositions of such a variety of

media, a media editing system 309 is provided that may create data structures for

organizing and storing information regarding a composition and perform operations for

manipulating these data structures" (Col 8, Lines 22-26). Consequently, it would have

been obvious to one of ordinary skill in the art to implement the combined teaching with

viewing television programming deliverable to the receiver so as to facilitate the editing

of the "compositions" or enhance content and in response to viewing the television

programming creating the schema document associated with the television

programming so as to enhance the viewing pleasure of the television viewer.

In regard to claim 4, the combined teachings of Carr, Mori, Kuzma, Boetje,

ATVEF specification, Keronen, Geshwind, and Miller, fail to explicitly disclose the step

for creating the schema document comprises a step for creating the schema document

with an authoring tool. The Valdez Jr. reference teaches a graphical user interface with

an enhanced program editing system so to increase the ease of use for the operator.

Consequently, it would have been obvious to one of ordinary skill in the art to implement

the combined teaching with the step for creating the schema document comprises a

step for creating the schema document with an authoring tool for the stated advantage.

In regard to claim 30, the aforementioned combined teaching of claim 1 fails to

explicitly disclose the use of XML. The Valdez Jr. reference teaches the use of XML so

as to represent a wide variety of document types. Consequently, it would have been

obvious to one of ordinary skill in the art to implement the combined teaching with the

use of XML for the stated advantage.

5. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr,

Mori, Kuzma, Boetje, ATVEF specification, Keronen et al., Geshwind, Miller and further

in view of Goodman et al. (US Pat No 6,427,238).

In regard to claim 12, the aforementioned combined teaching of claim 1 fails to

explicitly disclose a timeline data structure that functions as the carousel data structure.

The Goodman et al. reference teaches a timeline data structure that functions as the

carousel data structure so as to provide a cyclic time-structured method of providing

enhanced programming to the viewer. Consequently, it would have been obvious to one

of ordinary skill in the art to implement the combined teaching with a timeline data

structure that functions as the carousel data structure so as to provide a cyclic time-

structured method of providing enhanced programming to the viewer.

In regard to claim 13, the aforementioned combined teaching of claim 1 fails to

explicitly disclose a carousel data structure functions as the timeline data structure. The

Goodman et al. reference teaches a carousel data structure that functions as the

timeline data structure so as to provide a cyclic time-structured method of providing

enhanced programming to the viewer. Consequently, it would have been obvious to one

of ordinary skill in the art to implement the combined teaching with a timeline data

structure that functions as the carousel data structure so as to provide a cyclic time-

structured method of providing enhanced programming to the viewer. The trigger data

structure, the announcement data structure, and the package data structure being

delivered as fast as possible is implicit to the reference. Assuming arguendo with

respect to the implicit teaching of the trigger data structure, the announcement data

structure, and the package data structure being delivered as fast as possible, it is

submitted that it would have been clearly obvious to one of ordinary skill in the art at the

time of the invention to implement the combined teaching with transmitting

enhancement data as fast as possible so as to advantageously provide the user with

real-time interactive programming.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sumaiya A. Chowdhury whose telephone number is

(571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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Business Center (EBC) at 866-217-9197 (toll-free).

SAC

ANDREW Y. KOENIG
PRIMARY PATENT EXAMINER